

## ID MOS Digital I.P. SHORTFORM

**IM149:** USB Interface



### PRODUCT DESCRIPTION

**The** IM149 contains all necessary hardware to implement the complete USB 'protocol layer' specified in the USB specification V1.1. This macro is design to be connected to a micro-controller core through a generic 8 bits parallel bus. The IM149 macro implements interrupt signaling with programmable interrupts mask.

### FEATURES

- Complies with USB specification Rev.1.1
- High-speed interface (12Mb/s)
- Implements the full USB protocol layer
- 1 Control end-point 2 Bulk end-points
- 1 Interrupt end-point
- Full synchronous macro
- Full scannable design
- 'SOF' tracking
- Parallel bus micro-controller interface
- Micro-controller maskable interrupts
- Uses external synchronous ram for data buffering
- 8 to 64 bytes common data

### TYPICAL APPLICATIONS

- Automotive
- Consumer Electronics
- Industrial Processes Automation
- Home Automation

### BLOCK DESCRIPTION

